1. (Currently Amended) An interface module (2a, 2b, 2c, 2d) comprising:

a first number of a series (5a, 5b, 5c, 5d) of ports (51a, 52a, 53a, 54a, 51b, 51c,

51d) and

a second number of a series (6a, 6b, 6c, 6d) of ports (61a, 62a, 63a, 64a), where a first port (51a, 51b, 51c, 51d) in the first number of a series of ports (51a, 52a, 53a, 54a, 51b, 51c, 51d) is connected by means of at least one data line not to any port (61a, 62a, 63a, 64a) in the series of the second number (6a, 6b, 6c, 6d) of ports but to a switching control unit (3a, 3b, 3c, 3d) connected to an interface device (4a, 4b, 4c, 4d), and where the subsequent input ports (52a, 53a, 54a) in the first number of a series (5a, 5b, 5c, 5d) of ports are connected in order by means of at least one respective data line to the ports (61a, 62a, 63a, 64a) in the series of the second number of a series (6a, 6b, 6c, 6d) of ports, starting with a first (61a) in the series of the second number of ports such that the second port (52a) in the series (5a, 5b, 5c, 5d) of the first number of ports is connected only to the first port (61a) in the series of the second number (6a, 6b, 6c, 6d) of ports, the third port (53a) in the series (5a, 5b, 5c, 5d) of the first number of ports is connected only to the second port (62a) in the series of the second number (6a, 6b, 6c, 6d) [[or]] of ports, and so on.

- 2. (Original) The interface module as claimed in claim 1, where the interface device comprises a number of Ethernet interfaces (4a, 4b, 4c, 4d, 11).
- 3. (Original) The interface module as claimed in claim 1, where a specification of the interfaces of the interface device (4a, 4b, 4c, 4d) is taken place by means of at least interface utilisation module (20) which has to be connected to the interface device.

US Patent Application 10/688,025 Atty Docket (H)02PH0443USP Inventor: Fechner 2 Supplemental Amendment in response to verbal communication with Examiner on 4/16/2008, submitted by fax on 4/22/2008 with certification

- 4. (Original) The interface module as claimed in claim 1, where data lines are in the form of separate and multipole bus lines (B1, B2, B3, B4).
- 5. (Previously Presented) An Ethernet switch comprising a header device (1) and a number of downstream interface modules (2a, 2b, 2c, 2d), particularly a number of downstream interface modules as claimed in claim 1, the header device (1) includes a crossbar device (7), each of said downstream interface modules has a first number of a series (5a, 5b, 5c, 5d) of ports and a second number of a series (6a, 6b, 6c, 6d) of ports, respectively, such that in each case the same one (51a, 51b, 51c, 51d) in the series of the first number (5a, 5b, 5c, 5d) of ports of one of said modules is connected not to any port (61a, 62a, 63a, 64a) of the second number of a series (6a, 6b, 6c, 6d) of ports of said one of said ports but connected to a switching control unit (3a, 3b, 3c, 3d) coupled to an interface device (4a, 4b, 4c 4d), and each of the further ports (52a, 53a, 54a) in the series of the first number (5a, 5b, 5c, 5d) of ports of said one of said module is connected to only one port in the second number (6a, 6b, 6c, 6d) of the series of ports of said one of said module by means of respective data lines routed in cascade form.
- 6. (Original) The Ethernet switch as claimed in claim 5, where the crossbar device (7) comprises a multiplicity of bus lines (B1, B2, B3, B4) which can be connected in a star-shaped form to respective switching control units (3a, 3b, 3c, 3d).
- 7. (Original) The Ethernet switch as claimed in claim 5, where the header device (1) comprises an interface device (11) which is connected to the crossbar device (7) by means of a bus line directly or via a switching control unit (9) in the header device (1).

US Patent Application 10/688,025 Atty Docket (H)02PH0443USP Inventor: Fechner 3 Supplemental Amendment in response to verbal communication with Examiner on 4/16/2008, submitted by fax on 4/22/2008 with certification

- 8. (Original) The Ethernet switch as claimed in claim 5, where the interface device comprises a number of Ethernet interfaces (4a, 4b, 4c, 4d, 11).
- 9. (Original) The Ethernet switch as claimed in claim 5, comprising at least one interface utilization module (20) connected to at least one interface device (4a, 4b, 4c, 4d, 11) for the specification of at least one interface (44a).
- 10. (Original) The Ethernet switch as claimed in claim 9, where the interface utilization module (20) is constructed as being an active module, a passive module and/or a (buffer)memory module.
- 11. (Original) The Ethernet switch as claimed in claim 5, where the data lines (B1, B2, B3, B4) are each in the form of separate, multipole G.Link connections.
- 12. (Original) The Ethernet switch as claimed in claim 5, where the crossbar device (7) comprises a PCI interface for connecting a management function device (8).
- 13. (Original) The Ethernet switch as claimed in claim 5, where the design of the Ethernet switch is modular and/or extendable.
- 14. (Original) The Ethernet switch as claimed in claim 5, where the bus lines (B1, B2, B3, B4) are arranged serially.
- 15. (Cancelled)
- 16 (Currently Amended) The method as claimed in claim 15, A method, including an interface module (2a, 2b, 2c, 2d) comprising:

a first number of a series (5a, 5b, 5c, 5d) of ports (51a, 52a, 53a, 54a, 51b, 51c, 51d) and

a second number of a series (6a, 6b, 6c, 6d) of ports (61a, 62a, 63a, 64a), where

US Patent Application 10/688,025 Atty Docket (H)02PH0443USP Inventor: Fechner 4 Supplemental Amendment in response to verbal communication with Examiner on 4/16/2008, submitted by fax on 4/22/2008 with certification

a first port (51a, 51b, 51c, 51d) in the first number of a series of ports (51a, 52a, 53a, 54a, 51b, 51c, 51d) is connected by means of at least one data line not to any port (61a, 62a, 63a, 64a) in the series of the second number (6a, 6b, 6c, 6d) of ports but to a switching control unit (3a, 3b, 3c, 3d) connected to an interface device (4a, 4b, 4c, 4d), and where

the subsequent input ports (52a, 53a, 54a) in the first number of a series (5a, 5b, 5c, 5d) of ports are connected in order by means of at least one respective data line to the ports (61a, 62a, 63a, 64a) in the series of the second number of a series (6a, 6b, 6c, 6d) of ports, starting with a first (61a) in the series of the second number of ports such that the second port (52a) in the series (5a, 5b, 5c, 5d) of the first number of ports is connected only to the first port (61a) in the series of the second number (6a, 6b, 6c, 6d) of ports, the third port (53a) in the series (5a, 5b, 5c, 5d) of the first number of ports is connected only to the second port (62a) in the series of the second number (6a, 6b, 6c, 6d) of ports, and so on,

in which each switching control unit (3a, 3b, 3c, 3d) is produced as part of an interface module (2a, 2b, 2c, 2d) such that information to be transmitted to a downstream interface module (2b, 2c, 2d) from the crossbar device (7) is routed through the respective upstream interface module (2a, 2b, 2c) in cascade form.

17. (Cancelled)

US Patent Application 10/688,025 Atty Docket (H)02PH0443USP Inventor: Fechner 5
Supplemental Amendment in response to verbal communication with Examiner on 4/16/2008, submitted by fax on 4/22/2008 with certification